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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/743,513	PRAVEENKUMAR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Diego Herrera	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for alloware	Responsive to communication(s) filed on 19 December 2003. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 19 December 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

 Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

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later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-8, & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent No: 6006105), and in view of Balasuriya (US patent publication 2003/0126330 A1).

Regarding Claim 1. Rostoker teaches a method for selecting one or more modalities from a group of modalities available in a communication device having a modality manager, the communication device operating in one or more communication systems (Col 4, lines 61-65 & Col 5, lines 46-67), the method comprising the steps of: (a) determining the available bandwidth <u>of a first communication system</u> (Col 4, lines 61-65; Col 5, lines 8-15), (b) providing the bandwidth information determined in step (a) to the modality manager (Col. 5, lines 8-13 & Col 5, lines 46-51 (microcontroller selectively activates one of the first and second adaptation branches...), and

(c) Rostoker teaches having the modality manager select the one or more modalities based on the bandwidth information (Col. 5, lines 51-67 (microcontroller controls adaptation circuit for conversion of information ...form and format or standard or protocol)), however, Rostoker does not teach while inhibiting the operation of the remaining modalities based on the bandwidth information of the first communication system.

Nonetheless, Balasuriya teaches <u>inhibiting the operation of the remaining</u>

modalities based on the bandwidth information <u>of the first communication</u>

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system (abstract, title, fig. 2-4, paragraphs [0012]-[0014] & [0019]-[0022], hence the location information or ambient sensor can inhibit certain operation of the mobile terminal while still accessing others for communication).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Rostoker to specifically include <u>inhibiting the operation of the remaining modalities</u> based on the location information <u>of the first communication system</u> as taught by Balasuriya for the purposes of appropriate profile selection (paragraph [0037]).

Regarding Claim 3. Rostoker teaches wherein the one or more modalities comprise input modalities (CoI 5, lines 24-30).

Regarding Claim 4. Rostoker teaches wherein the one or more modalities include video, still pictures, audio clips, voice and text (Col5, lines 24-27).

Regarding Claim 5. Rostoker teaches wherein the one or more modalities comprise output modalities (Col 5, lines 24u301.

Regarding Claim 6. Rostoker teaches wherein the modality manager dynamically adapts the one or more modalities selected in step (c) based on a change in operational conditions (Col 5, lines 8-12).

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Regarding Claim 7. Rostoker teaches wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the bandwidth or change in cost of the service presently being used (Col 4, lines 61-65).

Regarding Claim 8. Rostoker teaches everything as applied above in Claim 6. However, Rostoker fails to specifically teach wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the current ambient noise above a predetermined threshold level. The examiner maintains that the claimed limitation was well known in the art as taught by Balasuriya. In the same field of endeavor, Balasuriya discloses a multimodal communication apparatus including a condition sensor, wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the current ambient noise above a predetermined threshold level (paragraph 0016).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the multimodal communication system with the condition sensor as taught by Balasuriya, together with the system of

Regarding Claim 10. The combination of Rostoker and Balasuriya further teaches wherein the modality manager keeps track of user preferences for

Rostoker, in order to have selection criteria based on cost, bandwidth.

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different modalities amongst the plurality of modalities and when the modality manager has to adapt the one or more modalities previously selected, the modality manager uses the preference information to select one or more new modalities to use (Balasuriya: paragraph 0013, lines 1-9).

4. Claims 2, 11-14, 16, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105), and in view of Balasuriya (US patent publication 2003/0126330 A1), and in further view of Sainton (U.S. Patent No. 6934558 B1).

Regarding Claim 2. The combination teaches everything as applied above in Claim 1.

However, the combination fails to specifically teach (d) determining the cost with using one or more of the modalities, (e) providing the cost information determined in step (d) to the modality manager, and (9 having the modality manager select the one or more modalities based on the cost information. The examiner maintains that the claimed limitation was well known in the art as taught by Sainton.

In the same field of endeavor, Sainton discloses an adaptive omni-modal radio apparatus and method where the device is capable of (d) determining the cost with using one or more of the modalities (Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, Lines 1-9), (e) providing the cost information determined in step (d) to the modality manager (Col 8, lines 34-39), and (9 having the modality manager

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select the one or more modalities based on the cost information (Col 6, lines 13-14 & Col 8, lines 39-41).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the omni-modal radio apparatus as taught by Sainton together with the system of the combination, in order to have selection criteria based on cost and bandwidth and therefore providing the least cost to the user.

Regarding Claim 11. The combination teaches a radio communication device, comprising: a receiver (Rostoker: Col 5, lines 33-36), and a modality manager coupled to the receiver, the modality manager is responsible for dynamically adapting one or more modalities being used based on bandwidth considerations, such that when the radio communication device is in communications with a first communication system, the modality manager selects the one or more modalities while inhibiting the operation of the remaining modalities based on the bandwidth and cost considerations of the first communication system (Rostoker: Col 4, lines 61-65 & Col 5, lines 46-67; Balasuriya: paragraph [0012]-[0014] and [0016]-[0019]).

However, the combination fails to specifically teach dynamically adapting one or more modalities being used based on cost considerations.

In the same field of endeavor, Sainton discloses an adaptive omni-modal radio apparatus and method where the device is capable of determining the cost with using one or more of the modalities (Col 5, lines 52-54 & Col 5, lines 66-67 & Col

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6, lines 1-9), providing the cost information determined in step (d) to the modality manager (Col 8, lines 34-39)', and having the modality manager select the one or more modalities based on the cost information (Col 6, lines 13-14 & Col 8, lines 39-41).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the omni-nodal radio apparatus as taught by Sainton together with the system of Rostoker, in order to have selection criteria based on cost and bandwidth.

Regarding Claim 12. The combination of Rostoker and Sainton and Balasuriya teaches everything as applied above in Claim 11. However, the combination fails to specifically teach wherein the modality manager dynamically adapts one or more modalities currently being used if the ambient noise is above a predetermined threshold. The examiner maintains that the claimed limitation was well known in the art as taught by Balasuriya.

In the same field of endeavor, Balasuriya discloses a multimodal communication apparatus including a condition sensor, wherein the modality manager dynamically adapts one or more modalities currently being used if the ambient noise is above a predetermined threshold level (paragraph 0016).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the multimodal communication system with the condition sensor as taught by Balasuriya, together with the system of

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Rostoker and Sainton, in order to have selection criteria based on cost, bandwidth and ambient noise.

Regarding claim 13. The combination of Rostoker, Sainton, and Balasuriya further teaches a radio communication device comprising a microphone: coupled to the modality manager, and the microphone is used to determine the ambient noise (Balasuriya: Fig 1, Items 120 and 112 & paragraph 0016).

Regarding Claim 14. The combination of Rostoker and Balasuriya and Sainton further teaches wherein the one or more modalities comprise at least one of video, still pictures, audio clips, voice and text (Rostoker: Col 5, lines 24-27).

Regarding Claim 16. The combination of Rostoker and Balasuriya and Sainton further teaches wherein the modality manager further checks for communication system availability if the radio communication device can operate in different communication systems and uses this information to dynamically adapt the one or more modalities used (Rostoker: Col 5, lines 8-13 & Col 5, lines 56-67).

Regarding Claim 18. The combination of Rostoker and Balasuriya and Sainton further teaches wherein the modality manager ascertains the cost information from the first communication system (Sainton: Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9 & Col 8, lines 34-41).

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Regarding Claim 19. The combination of Rostoker and Balasuriya and Sainton further teaches a radio communication device, further comprising a memory coupled to the modality manager, and wherein the modality manager ascertains the cost information from information stored in the memory (Sainton: Col 8, lines 28-30 & Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9 & Col 8, lines 34-41).

Regarding Claim 20. The combination of Rostoker and Balasuriya and Sainton further teaches wherein the radio communication device comprises a cellular telephone Rostoker: Col 6, lines 34-37).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105), in view of Balasuriya (US patent publication 2003/0126330 A1), and in further view of Phillips (U.S. Pub. No.2003/0182125 A1).

Regarding Claim 9. The combination teaches everything as applied above in Claim 6 including dynamically adapting the selected one or more modalities (Col 4, lines 61-65 & Col 5, lines 56-67). However, combination fails to specifically teach wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities in order to protect the sensitive information from being heard by others. The examiner maintains that the claimed limitation was well known in the art as taught by Phillips.

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In the same field of endeavor, Phillips discloses a method and apparatus for multimodal communication wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities in order to protect the sensitive information from being heard by others (paragraph [0023], lines 1-23).

Therefore, it would have been obvious to one of ordinary skill in the ad, at the time the invention was made to use the method and apparatus for multimodal communication wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities as taught by Phillips together with the dynamically self adapting system of Rostoker and Balasuriya in order to have secure communications for communicating sensitive information.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105), in view Balasuriya (US patent publication 2003/0126330 A1), in view of Sainton (U.S. Patent No.6934558 B1) and further in view of Rabe (Patent No. 6138010).

Regarding Claim 15. The combination of Rostoker and Sainton and Balasuriya teaches everything as applied above in Claim 11 including a modality manager in the radio communication device (Rostoker: Col 5, lines 46-55). However, the combination fails to specifically teach wherein the first communication system has a server modality manager and the modality manager in the radio communication device communicates with the server modality manager in order

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to make sure that any information using a particular modality directed to the radio communication device can be supported. The examiner maintains that the claimed limitation was well known in the art as taught by Rabe.

In the same field of endeavor, Rabe discloses a multimode communication device where first communication system has a server modality manager and the modality manager in the radio communication device communicates with the server modality manager in order to make sure that any information using a particular modality directed to the radio communication device can be supported (Col 2, line 67 & Col 3, lines 1-7 & Col 3, lines 39-46 & Col 4, lines 26-29 & Fig 1, Items 114, 120, and 136).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the network controller/system controller as taught by Rabe together with the system of Rostoker and Sainton and Balasuriya, in order to have a multimode communication device with server modality manager capability.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105), in view of Balasuriya (US patent publication 2003/0126330 A1), in view of Sainton (U.S. Patent No.6934558 B1) and further in view of Phillips (U.S. Pub. No.2003/0182125 A1).

Regarding Claim 17. The combination of Rostoker and Sainton and Balasuriya teaches everything as applied above in Claim 11. However, the combination fails to specifically teach wherein the modality manager dynamically controls which of

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the one or more modalities may be used with an application that is selected by the radio communication device user. The examiner maintains that the claimed limitation was well known in the art as taught by Phillips.

In the same field of endeavor, Phillips discloses a multimodal communication apparatus where the modality manager dynamically controls which of the one or more modalities may be used with an application that is selected by the radio communication device user (paragraph 0023, lines 1-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the multimodal apparatus as taught by Phillips together with the system of Rostoker and Sainton and Balasuriya in order to have a user activated modality manager.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 6:30AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G. Lester can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DH

NICK CORSARO PRIMARY EXAMINER